



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:

CHOI et al.

Art Unit: 2687

Appln. No. 10/667,733

Examiner: Dung Lam

Filed: September 22, 2003

For: METHOD FOR POWER SAVING ROUTING IN WIRELESS NETWORKS

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INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

Enclosed are copies of the following reference documents.

<u>Publication Title</u>	<u>Author(s)</u>	<u>Publication Date</u>
"Power-Aware Localized Routing in Wireless Networks"	Stojmenovic and Lin	October 2001
"Energy-efficient Routing Protocols For Wireless Microsensor Networks"	Heinzelman et al.	August 1999
"Power Saving Routing Scheme in Wireless Networks"	Jong-Mu Choi et al.	April 2003

Summary of the references:

The Stojmenovic and Lin (2001) article discusses a "Power saving routing algorithm" which is a method for increasing a lifetime of a whole Ad Hoc Network by selecting a path minimizing the power (energy) consumption by controlling power when a routing path among nodes is set in the Ad Hoc Networks, or by routing through other nodes in case there for. The proposed localized power, cost, and power-cost efficient routing algorithms are loop-free and the authors show their efficiency by experiments. The authors describe an optimal integer n which denotes an optimum number of a routing hop (the number of nodes in the midst of routing) for minimizing the power consumption if a distance between a source node and a destination node and a transmission distance with the maximum power output are determined. The theory of the

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optimal integer is also given.

The Heinzelman et al. (1999) describes power (energy) models for energy-efficient routing protocols for wireless microsensor networks, including power consumed for in-nodes and explains the abbreviations "RM" and "HCB".

The article by Jong-Mu Choi, Jai-Hoon Kim, Young-Bae Ko, "Power Saving Routing Scheme in Wireless Networks," Journal of the Korea Information Science Society, Vol. 30, No. 2, Apr. 2003 (English Abstract provided) discloses a power saving routing scheme in wireless networks. This article supplements the weak point in the existing power saving routing algorithm as considering the gradual approach to final destination and the number of optimal nodes that participate in routing.

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All of the above-described references are submitted herewith along with form PTO-1449 for the convenience of the Examiner. The Choi et al. Article was not previously cited because it resulted from a search of the priority application at the Korean Patent Office, and the other articles are cited in accordance with the present Examiner's recent request to do so. In accordance with 37 C.F.R. § 1.97(c), the fee of \$180.00 set forth in § 1.17(p) is enclosed herewith.

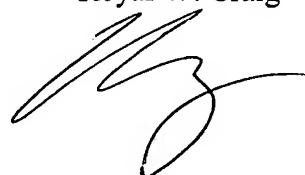
It is believed that this disclosure complies with the requirements of 37 C.F.R. §§ 1.56, 1.97, and 1.98, and the Manual of Patent Examining Procedures § 609. If for some reason the Examiner considers otherwise, it is respectfully requested that the undersigned be called at 410.385.2383 so that any deficiencies can be remedied.

Consideration of the foregoing and the making of the references formally of record in the instant application is respectfully requested.

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Respectfully submitted,

Royal W. Craig



Application of: CHOI et al.

Appln. No. 10/667,733

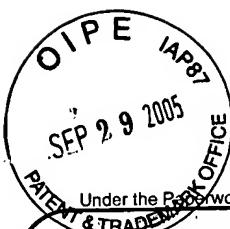
Page 3

Reg. No. 34,145

Attorney for Applicant

Date September 21, 2005

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

of

Complete if Known

Application Number	10/667,733
Filing Date	September 27, 2003
First Named Inventor	CHOI et al
Art Unit	2687
Examiner Name	Dung Lam
Attorney Docket Number	SEMIRE-PA-US-8

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1	STOJMENOVIC and LIN, "Power-Aware Localized Routing in Wireless Networks", ieee Transactions on Parallel and Distribution Systems, Vol. 12, No. 10, October 2001	
	2	HEINZELNMAN ET AL., "Energy-efficient Routing Protocols For Wireless Microsensor Networks", Proceedings of the 33rd Hawaii International Conference on System Sciences, 2000	
	3	JONG-MU CHOI ET AL., "Power Saving Routing Scheme in Wireless Networks", April 2003	

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:
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